MASS FLOWMETER

ABSTRACT OF THE DISCLOSURE

The present invention provides a high-performance mass flow controller which is compact and lightweight, which has a flow path having a simple structure and which does not have dead space in which a fluid is likely to stagnate and cause the problem of contamination. A cylindrical valve conduit having a hollow structure, a yoke and a sensor conduit are connected in tandem. A fluid inlet portion is connected to an end of the valve conduit and a fluid outlet portion is connected to an end of the sensor conduit. A solenoid valve is provided on a side of the fluid inlet portion and a thermal mass flowmeter is provided on a side of the fluid outlet portion. In the valve conduit, a cylindrical plunger providing a movable portion of the solenoid valve and a valve portion of which a degree of opening is adjusted by moving the plunger are provided on a side of the fluid inlet portion. A bypass for generating a laminar flow is disposed in the sensor conduit so as to effect one-way flow of a fluid.